

## METHODS, APPARATUS AND COMPUTER PROGRAM PRODUCTS FOR FORMULATING CULTURE MEDIA

### Abstract of the Disclosure

5 Methods, apparatus and computer program products are provided for  
identifying a component of culture medium based on the parameters (e.g.,  
physical, chemical, biological and/or topological characteristics) of compounds  
from within a compound library. In preferred embodiments, the compound library  
is a peptide library. Also provided are methods of selecting a compound library  
10 from a larger compound space based on whole molecule (*i.e.*, global) parameters  
of the compounds. Preferably, this method is practiced in conjunction with a  
method of identifying a component of a culture medium. Further provided are  
methods of predicting a biological activity of a peptide based on at least one  
whole molecule parameter of the peptide. This method finds use in methods of  
15 drug discovery, identifying components of culture medium, and identifying and/or  
designing peptides with particular pharmacological or therapeutic activities.